



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,781	07/20/2005	Walter Dorr	49090	9232
1609	7590	05/07/2007		
ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W. SUITE 600 WASHINGTON,, DC 20036			EXAMINER LOPEZ, FRANK D	
			ART UNIT 3745	PAPER NUMBER
			MAIL DATE 05/07/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,781

Applicant(s)

DORR, WALTER

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/20/05</u> . | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 112

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 9 and 10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9 line 2 "the Hall effect sensors" has no antecedent basis, since claim 1 only claims one Hall effect sensor (line 10).

Claim 10 is indefinite, since it depends from above claim 9.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is and are rejected under 35 U.S.C. § 102(b) as being anticipated by German 19539551.

Claims 1-4, 9 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Schabuble et al (see below). Accumulator in the claims is considered intended use and therefore is not given patentable weight. One having ordinary skill in the piston art would recognize that the sensor can be placed anywhere along the travel of the piston, including an end position of the piston, thereby meeting the limitations of claim 10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 5, and 6 are rejected under 35 U.S.C. § 103 as being unpatentable over Schabuble et al in view of Japan 11-132204. Schabuble et al discloses a piston type device comprising a piston (4, 22) of a non-magnetizable material (column 4 line 22-23) axially movable in a cylindrical tube (1) of magnetizable material (column 4 line 14-16); a plurality of permanent magnets (23, fig 6) mounted at a radial distance from a circumference of the piston, in a row, concentric with a longitudinal axis of the piston, with a same polarity relative to each other so that their polar axis extend parallel to the longitudinal axis; two Hall effect sensors (21, 21', fig 5, column 2 line 21-22) positioned on an exterior of the cylindrical tube, which responds to the field generated by the magnets, to determine piston position; wherein the magnets are adjacent a ring element (5) of magnetizable material adjoining one of the polar end surfaces of the magnets; wherein the ring element an exterior diameter forming a spacing from the tube, adjoining the magnets, and, more remote from the magnets having a exterior diameter approximating the interior diameter of the tube; but does not disclose that the Hall effect sensors sense end positions of the piston; or that the magnets are retained between ring elements of magnetizable material adjoining their polar end surfaces, wherein the ring elements surround the piston in a circumferential section having a diameter smaller than a circumferential section guided by the interior of the tube.

Japan 11-132204 teaches, for a piston type device comprising a piston (12) axially movable in a cylindrical tube (11); a plurality of permanent magnets (41a, fig 3) mounted at a radial distance from a circumference of the piston, in a row, concentric with a longitudinal axis of the piston, with a same polarity relative to each other so that their polar axis extend parallel to the longitudinal axis; a sensor (31) positioned on an exterior of the cylindrical tube, which responds to the field generated by the magnets, to determine piston position; wherein the magnets are adjacent a ring element (e.g. 42) of magnetizable material adjoining one of the polar end surfaces of the magnets; that the

Art Unit: 3745

magnets are retained between the ring element and a second ring element (43) of magnetizable material adjoining the polar end surfaces of the magnets, wherein the ring elements surround the piston in a circumferential section having a diameter smaller than a circumferential section guided by the interior of the tube, for the purpose of reducing cost (abstract).

Since Schabuble et al and Japan 11-132204 are both from the same field of endeavor, the purpose disclosed by Japan 11-132204 would have been recognized in the pertinent art of Schabuble et al. It would have been obvious at the time the invention was made to one having ordinary skill in the art to add a second ring element of magnetizable material adjoining the polar end surfaces of the magnets of Schabuble et al, wherein the ring elements surround the piston in a circumferential section having a diameter smaller than a circumferential section guided by the interior of the tube, as taught by Japan 11-132204, for the purpose of reducing cost.

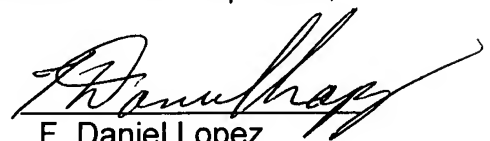
It is understood that both ring elements would look like the ring element of Schabuble et al.

Conclusion

Claims 7 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph (including idiomatic English problems), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:10 AM -4:40 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
April 25, 2007